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TERMINAL (ENTER 1, 2, 3, OR ?):2

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                 Needs, Quickly and Conveniently
        JAN 25
                 Annual Reload of MEDLINE database
NEWS
NEWS
        FEB 16
                 STN Express Maintenance Release, Version 8.4.2, Is
                 Now Available for Download
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        FEB 16
                 Derwent World Patents Index (DWPI) Revises Indexing
                 of Author Abstracts
        FEB 16
                 New FASTA Display Formats Added to USGENE and PCTGEN
NEWS
                 INPADOCDB and INPAFAMDB Enriched with New Content
NEWS
        FEB 16
                 and Features
NEWS
     8 FEB 16
                 INSPEC Adding Its Own IPC codes and Author's E-mail
                 Addresses
                 CAS Registry Number Crossover Limits Increased to
        APR 02
NEWS
                 500,000 in Key STN Databases
        APR 02
                 PATDPAFULL: Application and priority number formats
NEWS 10
                 enhanced
NEWS 11
        APR 02
                 DWPI: New display format ALLSTR available
NEWS 12
        APR 02
                 New Thesaurus Added to Derwent Databases for Smooth
                 Sailing through U.S. Patent Codes
NEWS 13
         APR 02
                 EMBASE Adds Unique Records from MEDLINE, Expanding
                 Coverage back to 1948
        APR 07
                 CA/CAplus CLASS Display Streamlined with Removal of
NEWS 14
                 Pre-IPC 8 Data Fields
                 50,000 World Traditional Medicine (WTM) Patents Now
NEWS 15
         APR 07
                 Available in CAplus
NEWS 16
        APR 07 MEDLINE Coverage Is Extended Back to 1947
```

NEWS EXPRESS FEBRUARY 15 10 CURRENT WINDOWS VERSION IS V8.4.2, AND CURRENT DISCOVER FILE IS DATED 15 JANUARY 2010.

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=> file reg

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 0.22 0.22

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STRUCTURE FILE UPDATES: 12 MAY 2010 HIGHEST RN 1222633-86-4 DICTIONARY FILE UPDATES: 12 MAY 2010 HIGHEST RN 1222633-86-4

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TSCA INFORMATION NOW CURRENT THROUGH January 8, 2010.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> logoff hold

COST IN U.S. DOLLARS SINCE FILE TOTAL. ENTRY SESSION 0.49 0.71

FULL ESTIMATED COST

SESSION WILL BE HELD FOR 120 MINUTES STN INTERNATIONAL SESSION SUSPENDED AT 05:47:54 ON 14 MAY 2010

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=>

\* \* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \* SESSION RESUMED IN FILE 'REGISTRY' AT 05:58:07 ON 14 MAY 2010 FILE 'REGISTRY' ENTERED AT 05:58:07 ON 14 MAY 2010 COPYRIGHT (C) 2010 American Chemical Society (ACS)

COST IN U.S. DOLLARS SINCE FILE TOTAL

ENTRY SESSION 0.71

FULL ESTIMATED COST 0.49

Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files\10594430\10594430 elected core.str

```
chain nodes :
10 11 12 13 20 21 22 23 24 25
ring nodes :
1 2 3 4 5 6 7 8 9 14 15 16 17 18 19 26 27 28 29 30 31 32 33
34 35 36 37
chain bonds :
1-23 \quad 4-10 \quad 10-11 \quad 10-12 \quad 11-14 \quad 12-13 \quad 17-20 \quad 20-21 \quad 20-22 \quad 21-25 \quad 22-24 \quad 24-27
25-26
ring bonds :
1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 5-7 \quad 6-9 \quad 7-8 \quad 8-9 \quad 14-15 \quad 14-19 \quad 15-16 \quad 16-17 \quad 17-18
18-19 26-33 26-37 27-28 27-32 28-29 29-30 30-31 31-32 33-34 34-35 35-36
36-37
exact/norm bonds :
1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 4-10 \quad 5-6 \quad 5-7 \quad 6-9 \quad 7-8 \quad 8-9 \quad 10-11 \quad 10-12 \quad 20-21 \quad 20-22
21-25 22-24
exact bonds :
1-23 11-14 12-13 17-20 24-27 25-26
normalized bonds :
```

## Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom 33:Atom 34:Atom 35:Atom 36:Atom 37:Atom

# L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> search l1 sss sam

SAMPLE SEARCH INITIATED 05:59:05 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED -1 TO ITERATE

0 ANSWERS 100.0% PROCESSED 1 ITERATIONS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

1 TO 80
0 TO 0 PROJECTED ITERATIONS: 0 TO PROJECTED ANSWERS:

L2 0 SEA SSS SAM L1

=> search l1 sss full

FULL SEARCH INITIATED 05:59:21 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 10 TO ITERATE

100.0% PROCESSED 10 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

L3 0 SEA SSS FUL L1

=>

Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files\10594430\10594430 2nd elected core.str

```
chain nodes :
10 11 12 13 20 21 22 23 24 25
ring nodes :
1 2 3 4 5 6 7 8 9 14 15 16 17 18 19 26 27 28 29 30 31 32 33
34 35 36 37
chain bonds :
1-23 \quad 4-10 \quad 10-11 \quad 10-12 \quad 11-14 \quad 12-13 \quad 17-20 \quad 20-21 \quad 20-22 \quad 21-25 \quad 22-24 \quad 24-27
25-26
ring bonds :
1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 5-7 \quad 6-9 \quad 7-8 \quad 8-9 \quad 14-15 \quad 14-19 \quad 15-16 \quad 16-17 \quad 17-18
18-19 26-33 26-37 27-28 27-32 28-29 29-30 30-31 31-32 33-34 34-35 35-36
36-37
exact/norm bonds :
1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 4-10 \quad 5-6 \quad 5-7 \quad 6-9 \quad 7-8 \quad 8-9 \quad 10-11 \quad 10-12 \quad 20-21 \quad 20-22
21-25 22-24
exact bonds :
1-23 11-14 12-13 17-20 24-27 25-26
normalized bonds :
```

## Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom 33:Atom 34:Atom 35:Atom 36:Atom 37:Atom

#### L4 STRUCTURE UPLOADED

=> d 14

L4 HAS NO ANSWERS

T.4 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> search 14 sss sam

SAMPLE SEARCH INITIATED 06:01:21 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 61 TO ITERATE

100.0% PROCESSED 61 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*

752 TO 1688 PROJECTED ITERATIONS: PROJECTED ANSWERS: 0 TO

L5 0 SEA SSS SAM L4

=> search 14 sss full

FULL SEARCH INITIATED 06:01:35 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 1069 TO ITERATE

100.0% PROCESSED 1069 ITERATIONS 1 ANSWERS

SEARCH TIME: 00.00.01

1 SEA SSS FUL L4 L6

=> d scan

L6 1 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

ΙN 2,1,3-Benzoxadiazol-4-amine, N-[[4-[bis[[[4-[bis[[[4-[bis[(4bromophenyl)thio]methyl]phenyl]methyl]thio]methyl]phenyl]methyl]thio]methy l]phenyl]methyl]-N-ethyl-7-nitro-

C112 H88 Br8 N4 O3 S14 MF

PAGE 1-B

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED

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FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 385.04 385.26

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FILE LAST UPDATED: 13 May 2010 (20100513/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2010
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2010

CAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2010.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> 16
            1 L6
L7
=> d 17
    ANSWER 1 OF 1 CAPLUS COPYRIGHT 2010 ACS on STN
ΑN
    2005:1075768 CAPLUS
DN
    143:367755
ΤI
    Dendrons and dendrimers having thioacetal linkages and method of producing
    the same
    Nakamura, Koki
ΙN
   Fuji Photo Film Co., Ltd., Japan
PA
SO
    PCT Int. Appl., 45 pp.
    CODEN: PIXXD2
DT
    Patent
   English
FAN.CNT 1
                       KIND DATE
                                          APPLICATION NO
PΙ
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PA:	ΓΕΝΤ	NO.			KIN:	D	DATE		-	APPL	ICAT	ION :	ON NO. DATE				
WO	2005	0928	 47		A1	_	2005	1006		wo 2	 005-	 JP65	 45		2	0050	328
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
							ID,										
		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	${ m MZ}$ ,	NΑ,	NΙ,	NO,
		NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SY,
		ТJ,	TM,	TN,	TR,	TT,	ΤZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW
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EP	1730						2006			EP 2						0050.	
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	1918						2007		1	CN 2	005-	8000	4779		21	0050	328
_	1005	-			_		2009			^		D405					
	2006						2006			KR 2						0060	
US	2008	0262	238		A1		2008	1023		US 2	006-	5944	30		21	0060	926

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PRAI JP 2004-95408 A 20040329
     JP 2004-96073
                         A
                               20040329
     JP 2004-96080
                         Α
                                20040329
                         W
     WO 2005-JP6545
                                20050328
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
   MARPAT 143:367755
RE.CNT 2
              THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
=> thio?
L8
       618641 THIO?
=> dendrimer
        11591 DENDRIMER
         14623 DENDRIMERS
         17009 DENDRIMER
T.9
                 (DENDRIMER OR DENDRIMERS)
=> dendron or star? or dendr?
          1733 DENDRON
          1786 DENDRONS
            14 DENDRA
          2594 DENDRON
                (DENDRON OR DENDRONS OR DENDRA)
        923113 STAR?
        113721 DENDR?
L10
       1032164 DENDRON OR STAR? OR DENDR?
=> 19 \text{ or } 110
L11 1032164 L9 OR L10
=> 18 and 111
L12
       22888 L8 AND L11
=> thioacetal
          1369 THIOACETAL
          1267 THIOACETALS
L13
          2032 THIOACETAL
                 (THIOACETAL OR THIOACETALS)
=> 112 \text{ mand } 113
MISSING OPERATOR L12 MAND
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.
=> 112 and 113
           71 L12 AND L13
L14
=> d 114 61-71 ti
L14 ANSWER 61 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
     2,5-Anhydro-1-deoxy-D-lyxitol, 2,5-anhydro-1-deoxy-D-mannitol, and
     2,5-anhydro-1-deoxy-D-talitol. Synthesis and enzymic studies
L14 ANSWER 62 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
     lpha-Oxoketene dithioacetal chemistry. 2. Conjugate reductions with
     electrophilic reducing agents
L14 ANSWER 63 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
ΤI
    An improved synthesis of ketene dimethyl thioacetal monoxide
```

- L14 ANSWER 64 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Stereochemistry and mechanism of the base-induced loss of thiophenol from 1,1,3-tris(phenylthio)alkanes to form cyclopropanone dithioketals
- L14 ANSWER 65 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Synthesis of dl-pumiliotoxin C hydrochloride and its crystal structure
- L14 ANSWER 66 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Facile preparation of thioacetals in neutral medium starting from sodium borohydride
- L14 ANSWER 67 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Structure of turbicoryn, a new glucoside from Turbina corymbosa
- L14 ANSWER 68 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Chlorothiazide and dihydrochlorothiazide. Synthesis of some new derivatives
- L14 ANSWER 69 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Synthesis of thioacetals of amino sugars
- L14 ANSWER 70 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TI The preparation of aldotetroses from aldopentoses via 1,1-diethylsulfonyl-3,4,5-trihydroxypent-1-enes
- L14 ANSWER 71 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Oxazoles and oxazolones
- => d 114 50-60 ti
- L14 ANSWER 50 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Structure of 4,5-di-Q-acetyl-6-S-acetyl-2,3-di-S-ethyl-2,3,6-trithio-D-allose diethyl dithioacetal
- L14 ANSWER 51 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Stereocontrolled synthesis of lankanolide from 1,6-anhydro- $\beta$ -D-glucopyranose (levoglucosan). 1. Synthesis of the C-1/7 and C-8/15 segments
- L14 ANSWER 52 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Stereocontrolled synthesis of erythronolides A and B from 1,6-anhydro- $\beta$ -D-glucopyranose (levoglucosan). Skeleton assembly in (C9-C13) + (C7-C8) + (C1-C6) sequence
- L14 ANSWER 53 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Preparation of esters containing dithioacetal functions, useful as polymer stabilizers
- L14 ANSWER 54 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Chemistry of ayurvedic crude drugs. VII. Guggulu (resin from Commiphora mukul)-6. Absolute stereochemistry of guggultetrols
- L14 ANSWER 55 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TI A simple entry to functionalized seven-membered ring systems via  $\alpha$ -hydroxycyclobutane rearrangement followed by retroaldol cleavage
- L14 ANSWER 56 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TI New approach to annelated butenolides. Total synthesis of  $(\pm)$ -isodrimenin

- L14 ANSWER 57 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Rearrangement of mono-O-isopropylidene derivatives of aldose diethyl dithioacetals
- L14 ANSWER 58 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Inversion of reactivity (umpolung) of  $\alpha,\beta$ -ethylenic ketones and aldehydes. Electrochemical deprotection of  $\gamma$  thioacetalated phosphonium salts
- L14 ANSWER 59 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Chemoselective behavior of enolate carbenes derived from dianions of enol thioacetals
- L14 ANSWER 60 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Preparation and reactions of some reagents for umpolung under phase-transfer catalysis
- => 113(1)111
- L15 27 L13(L)L11
- => d 113 17-27 ti
- L13 ANSWER 17 OF 2032 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Water Mediated Construction of Trisubstituted Pyrazoles/Isoxazoles Library using Ketene Dithioacetals
- L13 ANSWER 18 OF 2032 CAPLUS COPYRIGHT 2010 ACS on STN
- TI A vicinal acyloxy group participation SN2 reaction of thiol nucleophiles in the formation of thioacetals
- L13 ANSWER 19 OF 2032 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Process for preparation of fluorine-containing  $\alpha\text{-}\textsc{oxo}$  ketene dithioacetals
- L13 ANSWER 20 OF 2032 CAPLUS COPYRIGHT 2010 ACS on STN
- TI An efficient and chemoselective method for synthesis of 1,3-oxathiolanes from aldehydes and their deprotection catalyzed by V(HSO4)3
- L13 ANSWER 21 OF 2032 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Catalytic carbon-sulfur bond formation by amphoteric vanadyl triflate: exploring with thia-Michael addition, thioacetalization, and transthioacetalization reactions
- L13 ANSWER 22 OF 2032 CAPLUS COPYRIGHT 2010 ACS on STN
- TI One-pot synthesis of new tetrasubstituted thiophenes and selenophenes
- L13 ANSWER 23 OF 2032 CAPLUS COPYRIGHT 2010 ACS on STN
- ${
  m TI}$  Novel Synthesis of 4H-Quinolizine Derivatives Using Sulfonyl Ketene Dithioacetals
- L13 ANSWER 24 OF 2032 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Anionic cyclizations of aromatic ester dithioacetals with facially biased  $\alpha,\beta\text{--unsaturated}$  ketones
- L13 ANSWER 25 OF 2032 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Total Synthesis and Absolute Stereochemistry of Integric Acid
- L13 ANSWER 26 OF 2032 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Silicon- and sulfur-mediated synthesis of benzoannulated cyclooctanols
- L13 ANSWER 27 OF 2032 CAPLUS COPYRIGHT 2010 ACS on STN

TI Preparation of benzimidazole linked pyrrolo[2,1-c][1,4]benzodiazepine hybrids as antitumor agents

### => d 113 17, 21 ti fbib abs

- L13 ANSWER 17 OF 2032 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Water Mediated Construction of Trisubstituted Pyrazoles/Isoxazoles Library using Ketene Dithioacetals
- AN 2009:1494822 CAPLUS
- DN 152:74937
- TI Water Mediated Construction of Trisubstituted Pyrazoles/Isoxazoles Library using Ketene Dithioacetals
- AU Savant, Mahesh M.; Pansuriya, Akshay M.; Bhuva, Chirag V.; Kapuriya, Naval; Patel, Anil S.; Audichya, Vipul B.; Pipaliya, Piyush V.; Naliapara, Yoqesh T.
- CS Department of Chemistry, Chemical Research Laboratory, Saurashtra University, Rajkot, 360005, India
- SO Journal of Combinatorial Chemistry (2010), 12(1), 176-180 CODEN: JCCHFF; ISSN: 1520-4766
- PB American Chemical Society
- DT Journal
- LA English
- AB A small mol. library of alkyl, sulfone, and carboxamide functionalized pyrazoles and isoxazoles has been developed via a rapid sequential condensation of various  $\alpha$ -acylketene dithioacetals with hydrazine hydrate or hydroxylamine hydrochloride, followed by oxidation of sulfide to sulfone using water as the reaction medium. The newly developed methodol. has the advantages of excellent yield and chemical purity with short reaction time using water as a solvent.
- RE.CNT 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L13 ANSWER 21 OF 2032 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Catalytic carbon-sulfur bond formation by amphoteric vanadyl triflate: exploring with thia-Michael addition, thioacetalization, and transthioacetalization reactions
- AN 2009:1415179 CAPLUS
- DN 152:144056
- TI Catalytic carbon-sulfur bond formation by amphoteric vanadyl triflate: exploring with thia-Michael addition, thioacetalization, and transthioacetalization reactions
- AU Chen, Chien-Tien; Lin, Yow-Dzer; Liu, Cheng-Yuan
- CS Department of Chemistry, National Taiwan Normal University, Taipei, 11650, Taiwan
- SO Tetrahedron (2009), 65(50), 10470-10476 CODEN: TETRAB; ISSN: 0040-4020
- PB Elsevier Ltd.
- DT Journal
- LA English
- OS CASREACT 152:144056
- AB A series of thiols were examined as protic nucleophiles for Michael-type addns. to  $\alpha, \beta$ -unsatd. carbonyls as well as double nucleophilic condensations with aldehydes, ketones, and acetals catalyzed by amphoteric, water-tolerant vanadyl triflate under mild and neutral conditions. The newly developed C-S bond formation protocols were carried out smoothly in good to high yields in a highly chemoselective manner.
- RE.CNT 93 THERE ARE 93 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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-1.70

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STRUCTURE FILE UPDATES: 12 MAY 2010 HIGHEST RN 1222633-86-4 DICTIONARY FILE UPDATES: 12 MAY 2010 HIGHEST RN 1222633-86-4

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http://www.cas.org/support/stngen/stndoc/properties.html

Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files $\10594430\10594430$  thio acetal core.str



chain nodes : 1 2 3 ring/chain nodes : 4 5 chain bonds : 1-3 1-2 2-4 3-5 exact/norm bonds : 1-3 1-2 2-4 3-5

Match level : 1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS

L16 STRUCTURE UPLOADED

=> d 116L16 HAS NO ANSWERS L16 STR



Structure attributes must be viewed using STN Express query preparation.

50 ANSWERS

=> search 116 sss sam
SAMPLE SEARCH INITIATED 06:13:53 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 3264 TO ITERATE

61.3% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 61854 TO 68706 PROJECTED ANSWERS: 43778 TO 49572

L17 50 SEA SSS SAM L16

=> d scan

L17 50 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN INDEX NAME NOT YET ASSIGNED MF C21 H20 F3 N3 O3 S2

$$\begin{array}{c} \text{S-CH}_2\text{-S-CH}_2\text{-C-NH-CH}_2\text{-CH}_2\text{-OMe} \\ \\ \text{N} \\ \\ \text{CF}_3 \end{array}$$

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):5

L17 50 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN
IN Acetamide, 2-[[[[3-(2-fluorophenyl)-3,4-dihydro-4-oxo-2-quinazolinyl]thio]methyl]thio]-N-hexylMF C23 H26 F N3 O2 S2

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L17 50 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN Benzene, [[(4R,5R,6E)-7-iodo-4,6-dimethyl-3-methylene-1-(methylthio)-5[(triethylsilyl)oxy]-6-hepten-1-yl]sulfonyl]
MF C23 H37 I O3 S2 Si

Absolute stereochemistry. Double bond geometry as shown.

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

Absolute stereochemistry.

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L17 50 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN Acetamide, N,N-diethyl-2-[[[[3-(2-fluorophenyl)-3,4-dihydro-4-oxo-2-quinazolinyl]thio]methyl]thio]-

MF C21 H22 F N3 O2 S2

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L17 50 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN Benzeneacetonitrile,  $\alpha$ -[bis[(1-methylethyl)thio]methylene]-4-iodo-

MF C15 H18 I N S2

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> search 116 sss full FULL SEARCH INITIATED 06:14:36 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 63971 TO ITERATE

100.0% PROCESSED 63971 ITERATIONS SEARCH TIME: 00.00.01

45845 ANSWERS

L18 45845 SEA SSS FUL L16

=> save temp thioacetlcore/a
ENTER L#, L# RANGE, ALL, OR (END):118
THIOACETLCORE/A IS NOT A VALID SAVED NAME
Enter the name you wish to use for the saved query,
answer set, or L-number list. The name must:

- 1. Begin with a letter,
- 2. Have 1-12 characters,
- 3. Contain only letters (A-Z) and numbers (0-9),
- 4. End with /Q for a query (search profile, structure, or screen set), /A for an answer

set, or /L for an L-number list.

- 5. Not already be in use as a saved name,
- 6. Not be END, SAV, SAVE, SAVED
- 7. Not have the form of an L-number (Lnnn). ENTER NAME OR (END):end

=> save temp 118 thiocore/a
ANSWER SET L18 HAS BEEN SAVED AS 'THIOCORE/A'

=> file caplus COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 193.50 622.49

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL
ENTRY SESSION
0.00 -1.70

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FILE COVERS 1907 - 14 May 2010 VOL 152 ISS 21

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REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2010

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2010

CAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2010.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> 118 L19 23329 L18

=> d his

L1

L2

L3

L4

(FILE 'HOME' ENTERED AT 05:47:13 ON 14 MAY 2010)

FILE 'REGISTRY' ENTERED AT 05:47:48 ON 14 MAY 2010
STRUCTURE UPLOADED
0 SEARCH L1 SSS SAM
0 SEARCH L1 SSS FULL
STRUCTURE UPLOADED

L5 0 SEARCH L4 SSS SAM

1.6 1 SEARCH L4 SSS FULL FILE 'CAPLUS' ENTERED AT 06:01:57 ON 14 MAY 2010 L7 1 L6 L8 618641 THIO? L917009 DENDRIMER 1032164 DENDRON OR STAR? OR DENDR? L10 1032164 L9 OR L10 L11L12 22888 L8 AND L11 L13 2032 THIOACETAL L14 71 L12 AND L13 L15 27 L13(L)L11 FILE 'REGISTRY' ENTERED AT 06:13:23 ON 14 MAY 2010 L16 STRUCTURE UPLOADED L17 50 SEARCH L16 SSS SAM L18 45845 SEARCH L16 SSS FULL SAVE TEMP L18 THIOCORE/A FILE 'CAPLUS' ENTERED AT 06:16:17 ON 14 MAY 2010 L19 23329 L18 => 111 and 119 1109 L11 AND L19 => 111 (1) 119 171 L11 (L) L19 => d 121 161-171 ti L21 ANSWER 161 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN Branched chain cyclitols: asymmetric synthesis of a

- $1\alpha$ , 25-dihydroxy-19-norvitamin D3 A-ring synthon
- L21 ANSWER 162 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- ТΤ Electrophotographic material for color proofing
- L21 ANSWER 163 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- Spongian pentacyclic diterpenes. Stereoselective synthesis of ТΤ (-)-dendrillol-1
- L21 ANSWER 164 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- First synthetic approach to spongian pentacyclic diterpenoids. Enantioselective synthesis of dendrillol 1
- L21 ANSWER 165 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- Total synthesis of 8(S)-, 9(S)-, 11(S)-, and 12(S)-hydroxyeicosatetraenoic ΤТ acids (HETE) methyl esters
- L21 ANSWER 166 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TΙ Stabilization of denmert fumigant composition
- L21 ANSWER 167 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- Ammonium and amine salts of diperfluoroalkyl group-containing acids, compositions and use thereof
- L21 ANSWER 168 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- Controlling fungal growth on leather: correlation of 2-(thiocyanomethylthio) benzothiazole uptake and duration of mold resistance
- L21 ANSWER 169 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN

- TI Dieldrin-14C elimination from chickens
- L21 ANSWER 170 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Labeling of a new fungicide with tritium and carbon-14. synthesis of S-n-butyl S'-p-tert-butylbenzyl N-3-pyridyl-[5-3H]-dithiocarbonimidate [Denmert]
- L21 ANSWER 171 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Observations on starvation diets and hunger ketosis
- => d 121 150-160 ti
- L21 ANSWER 150 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Liquid developer for electrostatography
- L21 ANSWER 151 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- Fluorinated ketene dithioacetals. 4. Perfluoroketene dithioacetals as starting materials for the synthesis of \$\alpha\$-trifluoromethyl-\$\gamma\$-lactones
- L21 ANSWER 152 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Electrophotographic liquid developers with good dispersibility for durable offset printing masters
- L21 ANSWER 153 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Electrophotographic liquid developers providing rapid electrophotographic development-fixation and having good dispersibility and performing well even with large master plates
- L21 ANSWER 154 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Electrophotographic photoreceptors
- L21 ANSWER 155 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Conjugated diene copolymer latex compositions
- L21 ANSWER 156 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Electrostatographic liquid developer
- L21 ANSWER 157 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Electrophotographic liquid developers providing rapid electrophotographic development-fixation and having good dispersibility
- L21 ANSWER 158 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Development of silver halide photographic material
- L21 ANSWER 159 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Electrophotographic photoreceptor suited for low-power laser scanning
- L21 ANSWER 160 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Electrophotographic photoreceptor using star-type copolymer binder resin
- => d 121 159,160 ti fbib abs
- L21 ANSWER 159 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Electrophotographic photoreceptor suited for low-power laser scanning
- AN 1994:284903 CAPLUS
- DN 120:284903
- OREF 120:50045a,50048a
- TI Electrophotographic photoreceptor suited for low-power laser scanning
- IN Kato, Eiichi; Ishii, Kazuo

PA Fuji Photo Film Co Ltd, Japan SO Jpn. Kokai Tokkyo Koho, 63 pp. CODEN: JKXXAF DTPatent LA Japanese FAN.CNT 6 KIND DATE APPLICATION NO. DATE PATENT NO. --------- ------A 19930611 JP 1991-334539 19911125
A 19961203 US 1994-357150 19941215
JP 1991-221294 A 19910807
JP 1991-260531 A 19910912
JP 1991-291865 A 19911014
JP 1991-334539 A 19911125
JP 1992-220928 A 19920729
JP 1992-220928 A 19920729
JP 1992-224563 A 19920803
US 1993-39138 B2 19930407
US 1993-70540 B1 19930602 JP 05142797 US 5580690 PΙ A US 5580690 PATENT FAMILY INFORMATION: FAN 1994:204564 APPLICATION NO. KIND DATE PATENT NO. DATE \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_ JP 1991-291865 19911014
US 1994-357150 19941215
JP 1991-221294 A 19910807
JP 1991-260531 A 19910912
JP 1991-291865 A 19911014
JP 1991-334539 A 19911125
JP 1992-220928 A 19920729
JP 1992-224563 A 19920803
US 1993-39138 B2 19930407
US 1993-70540 B1 19930602 \_\_\_\_\_ 

 JP 05107779
 A 19930430

 US 5580690
 A 19961203

 PΙ FAN 1994:334824 PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_ \_\_\_\_\_ 

 JP 05040348
 A
 19930219

 JP 3115365
 B2 20001204

 US 5580690
 A 19961203

 JP 1991-221294 PΤ 19910807 US 1994-357150 19941215 JP 1991-221294 A 19910807 JP 1991-260531 A 19910912 F

FAN	1994:545247			JP 1991-260331 JP 1991-291865 JP 1991-334539 JP 1992-220928 JP 1992-224563 US 1993-39138 US 1993-70540		19911125
	PATENT NO.	KIND	DATE	APPLICATION NO.	_	DATE
PI		A A	19930326 19961203	JP 1991-260531 US 1994-357150 JP 1991-221294 JP 1991-260531 JP 1991-291865 JP 1991-334539 JP 1992-220928 JP 1992-224563 US 1993-39138 US 1993-70540	A A A A A B2	19910912 19941215 19910807 19910912 19911014 19911125 19920729 19920803 19930407 19930602
FAN	1994:641718 PATENT NO.	KIND	DATE	APPLICATION NO.	_	DATE

ΡI	JP 06051540	A	19940225	JP 1992-220928		19920729
	US 5580690	A	19961203	US 1994-357150		19941215
				JP 1991-221294	Α	19910807
				JP 1991-260531	Α	19910912
				JP 1991-291865	Α	19911014
				JP 1991-334539	Α	19911125
				JP 1992-220928	Α	19920729
				JP 1992-224563	Α	19920803
				US 1993-39138	В2	19930407
				US 1993-70540	В1	19930602
FAN	1994:641719					
	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
					-	1000000
PΙ	JP 06051541	A	19940225	JP 1992-224563		19920803
ΡI	JP 06051541 US 5580690	A A	19940225 19961203	JP 1992-224563 US 1994-357150		19920803
PI					A	
ΡI				US 1994-357150		19941215
L1				US 1994-357150 JP 1991-221294	A	19941215 19910807
Ьī				US 1994-357150 JP 1991-221294 JP 1991-260531	A A	19941215 19910807 19910912
<b>L</b> 1				US 1994-357150 JP 1991-221294 JP 1991-260531 JP 1991-291865	A A A	19941215 19910807 19910912 19911014
<b>L</b> 1				US 1994-357150 JP 1991-221294 JP 1991-260531 JP 1991-291865 JP 1991-334539	A A A	19941215 19910807 19910912 19911014 19911125
Ь1				US 1994-357150 JP 1991-221294 JP 1991-260531 JP 1991-291865 JP 1991-334539 JP 1992-220928	A A A A A	19941215 19910807 19910912 19911014 19911125 19920729

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB In the title electrophotog. photoreceptor with a photoconductor layer comprising at least an inorg. photoconductive material, a spectral sensitizing dye, and a binder resin, the binder resin is made up of ≥1 resin (a) and ≥1 resin (b). The resin (a) is an A-B graft copolymer containing ≥1 monofunctional macromonomer comprised of the A block polymer component with weight average mol. weight 1000-20,000 containing

PO3H2, COOH, SO3H, phenolic OH, P(:O)(OH)R1 [R1 = hydrocarbon, OR2; R2 = hydrocarbon], and/or cyclic anhydride and the B block polymer component containing at least [a1HC-Ca2(V1-R3)] [a1,2 = H, halo, cyano, hydrocarbon; V1 = COO, OCO, (CH2)aCOO, (CH2)aCOO, O, SO2, CO, CON(Z1), SON(Z1), CONHCOO, CONHCONH, C6H4; a = 1-3; Z1 = H, hydrocarbon; R3 = hydrocarbon; when V1 = C6H4, R3 = H or hydrocarbon], in which the backbone of the B block is terminated with a polymerizable double bond. The resin (b) is an A-B block star copolymer containing the A block [b1HC-Cb2(COOR4)] [b1,2 = H, halo, cyano, hydrocarbon; R4 = hydrocarbon] with weight average mol. weight 20,000-1,000,000 and the B block polymer component containing  $\geq$ 1 polar moiety selected from PO3H2, SO3H, COOH, P(:O)(OH)R1, and cyclic anhydride, in which the A-B block copolymers are bonded at  $\geq$ 3 sites of an organic mol.

L21 ANSWER 160 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN

TI Electrophotographic photoreceptor using star-type copolymer binder resin

AN 1994:231896 CAPLUS

DN 120:231896

OREF 120:40849a,40852a

TI Electrophotographic photoreceptor using star-type copolymer binder resin

IN Kato, Eiichi; Ishii, Kazuo

PA Fuji Photo Film Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 53 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PΙ	JP 05034941	A	19930212	JP 1991-208900	19910726
	JP 3112713	В2	20001127		

- AB In the title photoreceptor comprising a photoconductive layer containing at least an inorg. photo-conductive material, a spectrally sensitizing dye, and a binder resin, the above binder resin contains ≥1 star-type copolymer resin(A) comprising ≥3 A-B block polymeric chains bonded to 1 organic mol.. The above A-B block polymeric chain is based on an A block containing structure repeating unit CHalCa2(CO2R) (a1, a2 = H, halo, CN, hydrocarbon; R = hydrocarbon) and a B block containing a monomeric unit having ≥1 polar group(s) selected from PO3H2, SO3H, CO2H, P(O)(OH)R1 [R1 = hydrocarbon, OR2 (R2 = hydrocarbon)] and groups containing cyclic acid anhydride. The photoreceptor shows superior electrostatic properties (even under severe conditions) and good mech. properties to give good sharp images, and it is very useful in semiconductor laser scanning-exposure.
- => d 121 139-149 ti
- L21 ANSWER 139 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Oxazole derivatives, their production, and use for therapy of IL-6-associated and NO-associated diseases
- L21 ANSWER 140 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Synthesis of thio-AZT and halogen analogs starting from D-xylose
- L21 ANSWER 141 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Synthesis of new perfluoroalkylated bi-tailed anionic, nonionic and dianionic surfactants derived from ethyl 2-chloro-2-[2-(F-alkyl)ethylthio]acetates
- L21 ANSWER 142 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Preparation of meta-guanidine, urea, thiourea or azacyclic amino benzoic acid derivatives as integrin antagonists
- L21 ANSWER 143 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Substituted cyclic carbonyls and derivatives thereof useful as retroviral protease inhibitors
- L21 ANSWER 144 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Benzo-fused azepinone and piperidinone compounds useful in the inhibition of ACE and NEP.
- L21 ANSWER 145 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI 6-Substituted pyrazolo[3,4-d]pyrimidin-4-ones and compositions and methods of use as c-GMP phosphodiesterase inhibitors
- L21 ANSWER 146 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI 1-Benzyl-1,3-dihydro-2H-benzimidazol-2-one derivatives, their preparation, and pharmaceutical compositions containing them as vasopressin and/or oxytocin receptor ligands.
- L21 ANSWER 147 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Novel synthesis of  $\gamma$ -lactones starting from  $\beta, \gamma$ -unsaturated carboxylic esters
- L21 ANSWER 148 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Pyrimidine acyclonucleoside derivatives useful as antivirals
- L21 ANSWER 149 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Phenethylamine compounds with phosphodiesterase IV inhibiting activity

#### => d 121 128-138 ti

- L21 ANSWER 128 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Use of pyridinylaminoalkyl- and imidazolylalkyl-substituted thioureas, isothioureas, and guanidines as somatostatin agonists and antagonists, for treating diseases related to the eye
- L21 ANSWER 129 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Synthesis of defined polymers by reversible addition-fragmentation chain transfer: the RAFT process
- L21 ANSWER 130 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Preparation of 5-selenopentopyranose sugars from pentose starting materials by samarium(II) iodide or (phenylseleno)formate mediated ring closures
- L21 ANSWER 131 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Methods and agents for modulating the immune response and inflammation involving monocyte and dendritic cell membrane proteins
- L21 ANSWER 132 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Samarium(II) iodide mediated intramolecular homolytic substitution at selenium: preparation of 5-seleno-D-pentopyranose sugars from common pentose starting materials
- L21 ANSWER 133 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Oil based ink for making lithographic printing plate according to ink-jet printing process
- L21 ANSWER 134 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Storage-stable starch adhesives and paper coatings using the same
- L21 ANSWER 135 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Industrial synergistic microbicides containing dibromonitroethanol, methylenebis(thiocyanate), and bromoacetates
- L21 ANSWER 136 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI New kind of neurotoxic insecticide-Sai Chong Quan
- L21 ANSWER 137 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI H, 13C and 15N NMR studies on the  $\pi-$ electron distribution and intramolecular mobility of aminobuta-1,3-dienes
- L21 ANSWER 138 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Benzoxazinone and benzopyrimidinone piperidinyl tocolytic oxytocin receptor antagonists

### => d 121 129 ti fbib abs

- L21 ANSWER 129 OF 171 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Synthesis of defined polymers by reversible addition-fragmentation chain transfer: the RAFT process
- AN 2000:610043 CAPLUS
- DN 133:322211
- TI Synthesis of defined polymers by reversible addition-fragmentation chain transfer: the RAFT process
- AU Rizzardo, Ezio; Chiefari, John; Mayadunne, Roshan T. A.; Moad, Graeme; Thang, San H.
- CS CSIRO Molecular Science, Clayton South MDC, 3169, Australia
- SO ACS Symposium Series (2000), 768(Controlled/Living Radical Polymerization), 278-296

CODEN: ACSMC8; ISSN: 0097-6156

- PB American Chemical Society
- DT Journal
- LA English

AB Free radical polymerization in the presence of thiocarbonylthio compds. of general structure Z-C(=S)S-R provides living polymers of predetd. mol. weight and narrow mol. weight distribution by a process of reversible addition-fragmentation chain transfer. A rationale for selecting the most appropriate thiocarbonylthio compds. for a particular monomer type is presented with reference to the polymerization of methacrylates, styrenes, acrylates,

acrylamides and vinyl acetate. The efficacy of the process is further demonstrated by the synthesis of narrow polydispersity polystyrene-block-poly(Me acrylate)-block-polystyrene and 4-armed star polystyrene.

OSC.G 185 THERE ARE 185 CAPLUS RECORDS THAT CITE THIS RECORD (188 CITINGS)
RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> save temp all thiosrch/a
'THIOSRCH/A' IS NOT ALLOWED WITH ALL
The saved name of an L# list must end with '/L'.

=> logoff hold

COST IN U.S. DOLLARS SINCE FILE TOTAL SESSION ENTRY FULL ESTIMATED COST 44.01 666.50 SINCE FILE DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) TOTAL ENTRY SESSION -4.25 -2.55CA SUBSCRIBER PRICE

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 06:28:26 ON 14 MAY 2010

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: SSSPTA1623PAZ

### PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \* \* SESSION RESUMED IN FILE 'CAPLUS' AT 07:21:04 ON 14 MAY 2010 FILE 'CAPLUS' ENTERED AT 07:21:04 ON 14 MAY 2010 COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

SINCE FILE COST IN U.S. DOLLARS TOTAL ENTRY SESSION FULL ESTIMATED COST 44.01 666.50 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -2.55-4.25

=>

=> d his

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(FILE 'HOME' ENTERED AT 05:47:13 ON 14 MAY 2010)
     FILE 'REGISTRY' ENTERED AT 05:47:48 ON 14 MAY 2010
                STRUCTURE UPLOADED
L1
L2
              0 SEARCH L1 SSS SAM
L3
              0 SEARCH L1 SSS FULL
L4
                STRUCTURE UPLOADED
L5
              0 SEARCH L4 SSS SAM
L6
              1 SEARCH L4 SSS FULL
     FILE 'CAPLUS' ENTERED AT 06:01:57 ON 14 MAY 2010
L7
             1 L6
L8
        618641 THIO?
         17009 DENDRIMER
L9
       1032164 DENDRON OR STAR? OR DENDR?
L10
       1032164 L9 OR L10
L11
         22888 L8 AND L11
L12
L13
           2032 THIOACETAL
L14
            71 L12 AND L13
L15
             27 L13(L)L11
     FILE 'REGISTRY' ENTERED AT 06:13:23 ON 14 MAY 2010
L16
               STRUCTURE UPLOADED
             50 SEARCH L16 SSS SAM
L17
L18
          45845 SEARCH L16 SSS FULL
                SAVE TEMP L18 THIOCORE/A
     FILE 'CAPLUS' ENTERED AT 06:16:17 ON 14 MAY 2010
L19
       23329 L18
L20
          1109 L11 AND L19
L21
           171 L11 (L) L19
=> acetal
        53874 ACETAL
         27441 ACETALS
L22
        66784 ACETAL
                (ACETAL OR ACETALS)
=> 111(1)122
L23
        1758 L11(L)L22
=> photo?
L24 1761105 PHOTO?
=> 123 and 134
L34 NOT FOUND
The L-number entered could not be found. To see the definition
of L-numbers, enter DISPLAY HISTORY at an arrow prompt (=>).
=> 123 and 124
           71 L23 AND L24
L25
=> d 125 61-71 ti
L25 ANSWER 61 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
     Heat-sensitive copying material
L25 ANSWER 62 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
ΤI
     Interaction of starch anilides with photographic gelatin
L25 ANSWER 63 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
     Interaction of poly(vinyl acetal) of 2,4-disulfobenzaldehyde with gelatin
```

- L25 ANSWER 64 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- ΤТ Photosensitive sheets
- L25 ANSWER 65 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- Papers used for protection of photosensitive products, such as reels of photographic film
- ANSWER 66 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN L25
- Cyanoacetamidophthalic acid esters of polymers as gelatin substitutes in TΙ photographic emulsions
- L25 ANSWER 67 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- ΤI Gelling of water-soluble, hydrophilic, hydroxyl-containing polymers
- L25 ANSWER 68 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TΙ Penicillamine, its analogs and homologs
- ANSWER 69 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN L25
- Vinyl resins. IV. Solutions and the film-forming process ТΤ
- L25 ANSWER 70 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- TIPolyvinyl acetal resins
- L25 ANSWER 71 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- Photographic products ΤI
- => d 125 70 ti fbib abs
- L25 ANSWER 70 OF 71 CAPLUS COPYRIGHT 2010 ACS on STN
- ΤI Polyvinyl acetal resins
- 1938:51295 CAPLUS ΑN
- 32:51295 DN
- OREF 32:7163e-i
- ТΤ Polyvinyl acetal resins
- PAEastman Kodak Co.
- DTPatent
- LA Unavailable
- FAN.CNT 1

	PATENT NO.	. KIND		APPLICATION NO.	DATE	
ΡI	GB 483222		19380408	GB 1936-18987	19360708	

AB Resins are prepared by treating a partially or substantially completely hydrolyzed polyvinyl ester (other than formate) or polyvinyl alc., preferably in the presence of an acid acetalysis catalyst, with butyraldehyde and 1 or more of the substances, CH2O, AcH, propionaldehyde and cyclohexanone and its derivs., either simultaneously or successively under such conditions that the acetal portion of the product contains 10-80% of butyraldehyde acetal. The CO-containing substances may be replaced by substances that yield them, e. g., paraldehyde, acetaldehyde diethyl acetal, (CH2O)3, cyclohexanone diethyl acetal. When cyclohexanone is used, the reaction medium is preferably anhydrous. The resulting resins may be separated by

precipitation or

steam-distillation, which may be followed by precipitation and washing. products

may be dehydroxylated by esterification or etherification or may be deesterified. The resins may be plasticized. They may be pressed into blocks and skived to laminae for preparing laminated glass, cellulose nitrate or acetate or wood; made into films by coating a solution of the resin onto a glass or metal plate or a revolving drum, evaporating, stripping and curing by heating with warm air, or into threads or films by extrusion; they may be used as lacquers or varnishes; to impregnate fabrics or wood; to insulate elec. conductors; as antihalation, antistatic and anticurling backings for photographic films; as adhesives; as overcoatings for photographic films; as wetting, dispersing and sizing agents. In Brit. 483,223, Apr. 8, 1938, the butyraldehyde is replaced by a cyclic aldehyde, e. g., BzH or furfural, and the proportion thereof is such that the acetal portion of the product contains not more than 25% by mols. of cyclic aldehyde acetal. As in 483,222, when polyvinyl alc. is used as starting material it may be suspended in a solvent for the product, e. g., iso-PrOH or other lower aliphatic alc., C6H6, heptane, the aldehyde mixture together with the catalyst being added thereto, but a polyvinyl ester is preferably used as starting material and the reaction conducted in the presence of a deesterifying agent.

=> dendr? or star

113721 DENDR?

113603 STAR

108749 STARS

144014 STAR

(STAR OR STARS)

L26 256509 DENDR? OR STAR

=> 125 and 126

L27 6 L25 AND L26

=> d 127 1-6 ti

- L27 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Synthesis, characterization and protein binding properties of supported dendrons
- L27 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN
- TI The convergent synthesis of poly(glycerol-succinic acid) dendritic macromolecules
- L27 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Molecular resists with t-butyl cholate as a dendrimer core
- L27 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Synthesis and Characterization of Poly(glycerol-succinic acid)
  Dendrimers
- L27 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN
- TI TADDOLs, their derivatives, and TADDOL analogs: versatile chiral auxiliaries
- L27 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Phosphate-based dendrimers for bioassays
- => d 127 1-5 ti fbib abs
- L27 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Synthesis, characterization and protein binding properties of supported dendrons
- AN 2009:1075006 CAPLUS
- DN 151:464881
- TI Synthesis, characterization and protein binding properties of supported dendrons

- AU Iliashevsky, Olga; Amir, Liron; Glaser, Robert; Marks, Robert S.; Lemcoff, N. Gabriel
- CS Department of Chemistry, Ben-Gurion University of the Negev, Beer Sheva, 84105, Israel
- SO Journal of Materials Chemistry (2009), 19(36), 6616-6622 CODEN: JMACEP; ISSN: 0959-9428
- PB Royal Society of Chemistry
- DT Journal
- LA English
- OS CASREACT 151:464881
- AB Novel benzyl-ether type aldehyde and acetal terminated dendrons were synthesized and attached to a silica gel support; a linear spacer was also introduced as a control material. The supported dendritic compds. were mainly characterized by solid state 13C CP-MAS NMR, elemental anal. and XPS and the presence of free aldehydes was determined by the Purpald test. Bovine serum albumin (BSA) protein was coupled to the dendronized support by imine bond formation, followed by irreversible reduction of the carbon-nitrogen double bond. A significant pos. dendritic effect was observed on the antibody binding capacity of immobilized BSA as measured by fluorescence immunoassay (FIA).
- RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L27 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN
- TI The convergent synthesis of poly(glycerol-succinic acid) dendritic macromolecules
- AN 2003:967066 CAPLUS
- DN 140:146604
- TI The convergent synthesis of poly(glycerol-succinic acid) dendritic macromolecules
- AU Luman, Nathanael R.; Smeds, Kimberly A.; Grinstaff, Mark W.
- CS Departments of Chemistry and Biomedical Engineering, Duke University, Boston, MA, 02215, USA
- SO Chemistry--A European Journal (2003), 9(22), 5618-5626 CODEN: CEUJED; ISSN: 0947-6539
- PB Wiley-VCH Verlag GmbH & Co. KGaA
- DT Journal
- LA English
- AB The high-yield convergent synthesis of dendrons, dendrimers, and dendritic-linear hybrid macromols. composed of succinic acid, glycerol, and poly(ethylene glycol) (PEG) is described. This convergent synthesis relies on two orthogonal protecting groups; namely, the benzylidene acetal (bzld) for the protection of the 1,3-hydroxyls of glycerol and the tert-butyldiphenylsilyl (TBDPS) ester for protection of the carboxylic acid of succinic acid. These novel polyester dendritic macromols. are composed entirely of building blocks known to be bio-compatible or degradable in vivo to give natural metabolites. Derivatization of the dendritic periphery with a methacrylate affords a polymer that can be subsequently photo -cross-linked. The three-dimensional cross-linked gels formed by UV irradiation are optically transparent, with mech. properties dependent on the initial cross-linkable dendritic macromol.
- OSC.G 30 THERE ARE 30 CAPLUS RECORDS THAT CITE THIS RECORD (31 CITINGS)
- RE.CNT 83 THERE ARE 83 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L27 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Molecular resists with t-butyl cholate as a dendrimer core
- AN 2002:799416 CAPLUS
- DN 138:392961
- TI Molecular resists with t-butyl cholate as a dendrimer core
- AU Kim, Jin-Baek; Oh, Tae Hwan; Kwon, Young-Gil

- CS Dep. Chem., Sch. Mol. Sci., Cent. Adv. Functional Polymers, Korea Advanced Institute of Science and Technology, Daejon, 305-701, S. Korea
- SO Proceedings of SPIE-The International Society for Optical Engineering (2002), 4690(Pt. 1, Advances in Resist Technology and Processing XIX), 549-556

CODEN: PSISDG; ISSN: 0277-786X

- PB SPIE-The International Society for Optical Engineering
- DT Journal
- LA English
- AB Cholate derivs. as dendrimer cores containing ester groups as peripheral parts were synthesized for application in photoresists formulation for 193 nm lithog. Cholate derivs. provided etch resistance and peripheral parts provided coatability and acid-labile polarity change. They were synthesized using an acetal-protected anhydride derivative of 2,2-bis(hydroxymethyl)proponic acid as an acylating reagent. These dendrimer materials were grown to the 1st generation. The tert-butoxy esters were attached to the end of peripheral parts for pos.-tone resists. These mol. resist materials were coated on the silicon wafer and showed good sensitivity and etch resistance.
- OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
  RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
  ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L27 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Synthesis and Characterization of Poly(glycerol-succinic acid)
  Dendrimers
- AN 2001:752077 CAPLUS
- DN 136:6467
- TI Synthesis and Characterization of Poly(glycerol-succinic acid)
  Dendrimers
- AU Carnahan, Michael A.; Grinstaff, Mark W.
- CS Departments of Chemistry and Ophthalmology Paul M. Gross Chemical Laboratory, Duke University and Duke Medical Center, Durham, NC, 27708, USA
- SO Macromolecules (2001), 34(22), 7648-7655 CODEN: MAMOBX; ISSN: 0024-9297
- PB American Chemical Society
- DT Journal
- LA English
- AB The syntheses of novel dendrimers composed of glycerol and succinic acid are described. These "biodendrimers" are composed entirely of building blocks known to be biocompatible or degradable in vivo to natural metabolites and are prepared using a high yield divergent approach. Moreover, the synthetic strategy used is amenable to the design and development of new materials as demonstrated by the attachment of a photopolymerizable group.
- OSC.G 40 THERE ARE 40 CAPLUS RECORDS THAT CITE THIS RECORD (40 CITINGS)
- RE.CNT 83 THERE ARE 83 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L27 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN
- TI TADDOLs, their derivatives, and TADDOL analogs: versatile chiral auxiliaries
- AN 2001:53639 CAPLUS
- DN 134:251921
- TI TADDOLs, their derivatives, and TADDOL analogs: versatile chiral auxiliaries
- AU Seebach, Dieter; Beck, Albert K.; Heckel, Alexander
- CS Lab. Org. Chem., Eidg. Tech. Hochsch., ETH Zent., Zurich, 8092, Switz.
- SO Angewandte Chemie, International Edition (2001), 40(1), 92-138 CODEN: ACIEF5; ISSN: 1433-7851
- PB Wiley-VCH Verlag GmbH

DT Journal; General Review

LA English

Review with >467 refs. TADDOLs, which contain two adjacent AB diarylhydroxymethyl groups in a trans relationship on a 1,3-dioxolane ring, can be prepared from acetals or ketals of tartrate esters by reaction of the latter with aromatic Grignard reagents. They are extraordinarily versatile chiral auxiliaries. Here, a historical review of the subject is followed by discussion of the preparation of TADDOLs and analogous systems, including TADDOLs with N-, P-, O-, and S-heteroatom ligands appropriate for metals. Crystal structure anal. reveals that the heteroatoms on the diarylmethyl groups are almost always in close proximity to each other, joined together by H-bonds, and predisposed to form chelate complexes in which the metallic centers reside in propeller-like chiral environments. Applications of TADDOL derivs. in enantioselective synthesis extend from utilization as stoichiometric chiral reagents or in Lewis acid mediated reactions, to roles in catalytic hydrogenation and stereoregular metathesis polymerization Derivs. and complexes

based on the following metals have so far been investigated: Li, B, Mg, Al, Si, Cu, Zn, Ce, Ti, Zr, Mo, Rh, Ir, Pd, Pt. The number of stereoselective reactions already accomplished with TADDOLs is correspondingly large. It is also easy to prepare TADDOL derivs. that are readily polymerizable and graftable, and to transform them into immobilized solid-phase catalysts. The result is catalysts, simply or dendritically immobilized in polystyrene or on silica gel and characterized by unexpected stability even after multiple use in titanium TADDOLate mediated reactions. TADDOLs show further unusual characteristics that make them useful for applications in material science and supramol. chemical: they are the most effective doping agents known for phase transformations of achiral (nematic) into chiral (cholesteric) liquid crystals. The TADDOL OH group that is not involved in intramol. H-bonding shows a strong tendency to associate intermolecularly with H-bond acceptors. In the process of crystallization this leads, enantioselectively, to the formation

of inclusion compds. that lend themselves to the separation of racemic mixts. not otherwise suited to the classical method of crystallization through diastereomeric salts. The high m.ps. of TADDOLs even make possible the resolution of racemates by distillation Host-guest compds. formed between TADDOLs

and achiral partners can serve as platforms for enantioselective photoreactions. It seems safe to predict that many more applications will be discovered for the TADDOLs and their derivs.

OSC.G 267 THERE ARE 267 CAPLUS RECORDS THAT CITE THIS RECORD (271 CITINGS)

RE.CNT 554 THERE ARE 554 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> 126(1) 119
           71 L26(L) L19
L28
=> photo
        132261 PHOTO
          2510 PHOTOS
L29
        134617 PHOTO
                 (PHOTO OR PHOTOS)
=> photo?
L30
       1761105 PHOTO?
 75% OF LIMIT FOR TOTAL ANSWERS REACHED
=> 128 and 130
L31
             8 L28 AND L30
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#### => d 131 1-8 ti

- L31 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Synthesis of thermo-responsive 4-arm star-shaped porphyrin-centered poly(N,N-diethylacrylamide) via reversible addition-fragmentation chain transfer radical polymerization
- L31 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Electrophotographic photoreceptors
- L31 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Electrostatographic liquid developer
- L31 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Electrophotographic photoreceptor suited for low-power laser scanning
- L31 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Electrophotographic photoreceptor using star-type copolymer binder resin
- L31 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Electrophotographic material for color proofing
- L31 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Spongian pentacyclic diterpenes. Stereoselective synthesis of (-)-dendrillol-1
- L31 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN
- TI First synthetic approach to spongian pentacyclic diterpenoids. Enantioselective synthesis of dendrillol 1

# => d 131 1-8 ti fbib abs

- L31 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN
- TI Synthesis of thermo-responsive 4-arm star-shaped porphyrin-centered poly(N,N-diethylacrylamide) via reversible addition-fragmentation chain transfer radical polymerization
- AN 2009:1485774 CAPLUS
- DN 152:169515
- ${\tt TI}$  Synthesis of thermo-responsive 4-arm star-shaped porphyrin-centered poly(N,N-diethylacrylamide) via reversible addition-fragmentation chain transfer radical polymerization
- AU Yusa, Shin-Ichi; Endo, Tastuya; Ito, Masanori
- CS Department of Materials Science and Chemistry, Graduate School of Engineering, University of Hyogo, 2167 Shosha, Himeji, Hyogo, 671-2280, Japan
- SO Journal of Polymer Science, Part A: Polymer Chemistry (2009), 47(24), 6827-6838
  - CODEN: JPACEC; ISSN: 0887-624X
- PB John Wiley & Sons, Inc.
- DT Journal
- LA English

t.o

- OS CASREACT 152:169515
- AB Tetrafunctional porphyrins-containing trithiocarbonate groups were synthesized by an ordinary esterification method. This tetrafunctional porphyrin (TPP-CTA) could be used as a chain transfer agent in a controlled reversible addition-fragmentation chain transfer (RAFT) radical polymerization
- prepare well-defined 4-arm star-shaped polymers. N,N-Diethylacrylamide was

polymerized using TPP-CTA in 1,4-dioxane. Poly(N,N-diethylacrylamide) (PDEA) is known to be a thermo-responsive polymer, and exhibits a lower critical solution temperature (LCST) in water. The star-shaped PDEA polymer (TPP-PDEA)

was

therefore also thermo-responsive, as expected. The LCST of this polymer depended on its concentration in water, as confirmed by turbidity, dynamic light

scattering (DLS), static light scattering (SLS), and 1H NMR measurements. The porphyrin cores were compartmentalized in PDEA shells in aqueous media. Below the LCST, the fluorescence intensity of TPP-PDEA was about six times larger than that of a water-soluble low mol. weight porphyrin compound (TSPP), whose fluorescence intensity was independent of temperature Above the LCST,

the

fluorescence intensity of TPP-PDEA decreased, while the intensity was about three times higher than that of TSPP. These observations suggested that interpolymer aggregation occurred due to the hydrophobic interactions of the dehydrated PDEA arm chains above the LCST, with self-quenching of the porphyrin moieties arising from these interactions. .COPYRGT. 2009 Wiley Periodicals, Inc. J Polym Sci Part A: Polym Chem, 2009.

RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN

TI Electrophotographic photoreceptors

AN 1995:446441 CAPLUS

DN 122:201134

OREF 122:36515a,36518a

TI Electrophotographic photoreceptors

IN Kato, Eiichi; Ishii, Kazuo

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 91 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PAIL	NT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 0	6175379	А	19940624	JP 1992-349987 JP 1992-349987	19921203 19921203

The title receptors producing sharp images with liquid developers and suitable for low-power laser scanning exposure contain a photoconductive layer containing inorg. photoconductors, spectral sensitizers, and binder resins comprising (A) graft copolymers (Mw 1 + 103 to 2 + 104) from macromonomer(s) (Mw 1000-15000)chosen from CH(f1):C(f2)X1Y1CO2(Z1O2CZ2CO2)R31, CH(f1):C(f2)X1Y1CO2(Z3CO2)R31, CH(f1):C(f2)X2Y2V1(OCZ1CO2Z2O)R32, CH(f1):C(f2)X2Y2V1(OCZ30)R32, and  $CH(f1):C(f2)X3Y3O(W0)\alpha R33$  and (B) star block copolymers of ≥3 A-B block copolymer chains (Mw 2 + 104 to 1 + 106) of block A containing monomer(s) containing polar group(s) chosen from PO3H2, SO3H, CO2H, P(O)(OH)R1 (R1 = hydrocarbyl, hydrocarbyloxy), and cyclic acid anhydride group and block B of  $\geq$ 30% CH(b1)C(b2)CO2R4 unit (I) (b1, b2 = H, halogen, cyano, hydrocarbyl; R4 = hydrocarbyl) with polar group content 0.01-10%, and/or (C) star polymers (Mw 2 + 104 to 1 + 106) of organic mols. bonded to ≥3 I polymer chains whose free ends are bonded to polymer components having polar groups as in the above polymer B to polar group content 0.01-10% and I content  $\geq$ 30%. In the formulas, f1, f2 = H, halogen, cyano, C1-8 hydrocarbyl, CO2T1 with or without a linker; T1 = C1-18 hydrocarbyl; X1-3 = direct bond, CO2, O2C, (CH2)aCO2, (CH2)bO2C,CON(k1), CONHCONH, CONHCO2, O, C6H4, SO2; a, b = 1-3; k1 = H, C1-12 hydrocarbyl; Y1, Y2, Y3 = linking group; Z1, Z2 = divalent hydrocarbyl or aromatic group with or without O, S, N(k2), SO2, CO2, O2C, CONHCO, NHCONH, CON(k2), SO2N(k2), S(k2)(k3); k2, k3 as defined for k1; R31 = H, hydrocarbyl; Z3 = divalent aliphatic group; V1 = CH2, O, NH; R32, R33 = H, hydrocarbyl, COR34; R34 = hydrocarbyl;  $\alpha$  = 1-3; W = CH( $\alpha$ 1)CH( $\alpha$ 2), (CH2)4;  $\alpha$ 1,  $\alpha$ 2 = H, alkyl.

L31 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN

TI Electrostatographic liquid developer

AN 1995:370728 CAPLUS

DN 122:226747

OREF 122:41199a,41202a

TI Electrostatographic liquid developer

IN Kato, Eiichi

PA Fuji Photo Film Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 31 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 06289661 JP 3300461	A B2	19941018 20020708	JP 1993-96505	19930401
	OF 2200401	DΖ	20020708	JP 1993-96505	19930401

GI

AΒ In the title developer comprising resin particles dispersed in a non-aqueous solvent with elec. resistance  $\geq 109~\Omega.{\rm cm}$  and dielec. constant ≤3.5, the resin particles are prepared by polym. of a mixture containing  $(1) \ge 1$  monofunctional monomer (A) which is soluble in the solvent but becomes insol. by polymerization,  $(2) \ge 1$  monomer chosen from CHa1:C(a2)U1E1 [E1 =  $C \ge 8$  aliphatic, (A1B1)m(A2B2)nR21; A1, A2 = C1 -18 hydrocarbyl which may be substituted or contain CHB3 (A4B4)pR23 in the main chain; B1-4 = O, S, CO, CO2, O2C, SO2, NR22, CONR22, NR22CO, NR22SO2, SO2NR22, NHCO2, NHCONH; A4 = (substituted) C1 -18 hydrocarbyl; R21-23 = H, C1 -8 aliphatic; m, n, p = 0-4;  $m = n = p \neq 0$ ; U1 = CO2, CONH, CONE2, O2C, CONHCO2, CH2CO2, (CH2)sO2C, O, C6H4CO2; E2 = aliphatic, (A1B1)m(A2B2)nR21; s = 1-4; a1, a2 = H, alkyl, CO2E3, CH2CO2E3; E3= aliphatic] which is copolymerizable with the monomer A, and (3)  $\geq 1$  a star-shaped copolymer [weight average mol. weight (Mw) 5 + 103 to 1 +106] in which ≥3 polymer components and/or A-B type block polymer components are linked to an organic mol. as a dispersion stabilizer. star-shaped polymer component has ≥1 polar group selected from phosphono, carboxyl, sulfo, hydroxyl, formyl, amino, P(:0)(OH)R1 [R1 = hydrocarbyl(oxy)], CONR3R4, SO2NR3R4 (R3, R4 = H, hydrocarbyl), and cyclic acid anhydride group-containing groups. The block A contains the monomer A, the block B contains  $\geq 1$  monomer chosen from CHb1C(b2)X1Y1 [X1 = CO2, O2C, (CH2)xCO2, (CH2)xO2C, O; x = 1-3; Y1 = C $\geq$ 8 aliphatic; b1, b2 = H], halo, cyano, hydrocarbyl, CO2Z1 which may be linked via a hydrocarbyl group [Z1 = H, (substituted) hydrocarbyl], and one of the block A terminal is linked to the organic mol., the other to the block B. The developer shows good dispersibility and printing durability even when used in rapid developing-fixing process and for large size master plates.

Thus, Me methacrylate, Me acrylate, and I were photopolymd. and further photopolymd. with stearyl methacrylate to give an acrylic resin (Mw 6 + 104). A mixture of the resin, Me methacrylate, Me acrylate, and octadecyl acrylate in Isopar H (solvent) was polymerized to give latex particles, from which a liquid developer was prepared

L31 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN Electrophotographic photoreceptor suited for low-power laser 1994:284903 CAPLUS DN 120:284903 OREF 120:50045a,50048a TI Electrophotographic photoreceptor suited for low-power laser scanning IN Kato, Eiichi; Ishii, Kazuo PA Fuji Photo Film Co Ltd, Japan SO Jpn. Kokai Tokkyo Koho, 63 pp. CODEN: JKXXAF DT Patent LA Japanese CNT 6

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 05142797 A 19930611 JP 1991-334539 19911125

US 5580690 A 19961203 US 1994-357150 19941215

JP 1991-221294 A 19910807

JP 1991-260531 A 19910912

JP 1991-291865 A 19911014

JP 1991-334539 A 19911125

JP 1991-334539 A 19911125

JP 1992-220928 A 19920729

JP 1992-220928 A 19920729

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US 1993-39138 B2 19930407

US 1993-70540 B1 19930602 FAN.CNT 6 PIPATENT FAMILY INFORMATION: FAN 1994:204564 KIND DATE APPLICATION NO. PATENT NO. DATE A 19930430 JP 1991-291865 19911014
A 19961203 US 1994-357150 19941215
JP 1991-221294 A 19910807
JP 1991-260531 A 19910912
JP 1991-291865 A 19911014
JP 1991-334539 A 19911125
JP 1992-220928 A 19920729
JP 1992-224563 A 19920803
US 1993-39138 B2 19930407
US 1993-70540 B1 19930602 PI JP 05107779 US 5580690 FAN 1994:334824 KIND DATE APPLICATION NO. DATE PATENT NO. \_\_\_\_\_ 

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 A
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 JP 3115365
 B2 20001204

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 US 1994-357150

 PΙ 19910807 US 1994-357150 19941215
JP 1991-221294 A 19910807
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JP 1992-220928 A 19920729
JP 1992-224563 A 19920803
US 1993-39138 B2 19930407
US 1993-70540 B1 19930602

FAN 1994:545247

	PATENT NO.	KIND	DATE			DATE
PI	JP 05072755 US 5580690			JP 1991-260531	A A A A A B2	19910912 19941215 19910807 19910912 19911014 19911125 19920729 19920803 19930407
FAN			DATE			DATE
PI	JP 06051540 US 5580690	A A	19940225 19961203	JP 1992-220928 US 1994-357150 JP 1991-221294 JP 1991-260531 JP 1991-291865 JP 1991-334539 JP 1992-220928 JP 1992-224563 US 1993-39138 US 1993-70540	A A A A B2	19911014 19911125 19920729 19920803 19930407
	PATENT NO.	KIND	DATE		_	DATE
PI	JP 06051541 US 5580690	A	19940225		A A A	19910912 19911014 19911125

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB In the title electrophotog. photoreceptor with a photoconductor layer comprising at least an inorg. photoconductive material, a spectral sensitizing dye, and a binder resin, the binder resin is made up of ≥1 resin (a) and ≥1 resin (b). The resin (a) is an A-B graft copolymer containing ≥1

monofunctional macromonomer comprised of the A block polymer component with weight average mol. weight 1000-20,000 containing PO3H2, COOH, SO3H, phenolic OH,

P(:0)(OH)R1 [R1 = hydrocarbon, OR2; R2 = hydrocarbon], and/or cyclic
anhydride and the B block polymer component containing at least
[a1HC-Ca2(V1-R3)] [a1,2 = H, halo, cyano, hydrocarbon; V1 = COO, OCO,
(CH2)aOCO, (CH2)aCOO, O, SO2, CO, CON(Z1), SON(Z1), CONHCOO, CONHCONH,
C6H4; a = 1-3; Z1 = H, hydrocarbon; R3 = hydrocarbon; when V1 = C6H4, R3 =
H or hydrocarbon], in which the backbone of the B block is terminated with
a polymerizable double bond. The resin (b) is an A-B block star copolymer
containing the A block [b1HC-Cb2(COOR4)] [b1,2 = H, halo, cyano, hydrocarbon;
R4 = hydrocarbon] with weight average mol. weight 20,000-1,000,000 and the B
block

polymer component containing  $\geq 1$  polar moiety selected from PO3H2, SO3H, COOH, P(:O)(OH)R1, and cyclic anhydride, in which the A-B block copolymers are bonded at  $\geq 3$  sites of an organic mol.

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TI Electrophotographic photoreceptor using star-type copolymer binder resin
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AN 1994:231896 CAPLUS

DN 120:231896

OREF 120:40849a,40852a

TI Electrophotographic photoreceptor using star-type copolymer binder resin

IN Kato, Eiichi; Ishii, Kazuo

PA Fuji Photo Film Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 53 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡI	JP 05034941	A	19930212	JP 1991-208900	19910726	
	JP 3112713	В2	20001127			
				TP 1991-208900	19910726	

AB In the title photoreceptor comprising a photoconductive layer containing at least an inorg. photo-conductive material, a spectrally sensitizing dye, and a binder resin, the above binder resin contains ≥1 star-type copolymer resin(A) comprising ≥3 A-B block polymeric chains bonded to 1 organic mol.. The above A-B block polymeric chain is based on an A block containing structure repeating unit CHa1Ca2(CO2R) (a1, a2 = H, halo, CN, hydrocarbon; R = hydrocarbon) and a B block containing a monomeric unit having ≥1 polar group(s) selected from PO3H2, SO3H, CO2H, P(O)(OH)R1 [R1 = hydrocarbon, OR2 (R2 = hydrocarbon)] and groups containing cyclic acid anhydride. The photoreceptor shows superior electrostatic properties (even under severe conditions) and good mech. properties to give good sharp images, and it is very useful in semiconductor laser scanning-exposure.

L31 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN

TI Electrophotographic material for color proofing

AN 1993:637954 CAPLUS

DN 119:237954

OREF 119:42193a, 42196a

TI Electrophotographic material for color proofing

IN Kato, Eiichi; Osawa, Sadao

PA Fuji Photo Film Co., Ltd., Japan

SO Eur. Pat. Appl., 165 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI	EP 534479 EP 534479 R: DE, GB	A1 B1	19930331 19981209	EP 1992-116494	19920925		
	·			JP 1991-249819	Α	19910927	
				JP 1991-259430	Α	19911007	
				JP 1991-289648	Α	19911106	
				JP 1991-289649	Α	19911106	
	JP 05197169	A	19930806	JP 1992-310754		19920928	
				JP 1991-249819	A1	19910927	
				JP 1991-259430	A1	19911007	
				JP 1991-289648	A1	19911106	
				JP 1991-289649	A1	19911106	
	US 5670283	A	19970923	US 1994-279068		19940722	
				JP 1991-249819	Α	19910927	

 JP 1991-259430
 A 19911007

 JP 1991-289648
 A 19911106

 JP 1991-289649
 A 19911106

 US 1992-952941
 B1 19920928

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB An electrophotog. material for color proofing comprises a substrate, a photoconductive layer and a transfer layer in this order, and is used for preparing a color proof in a process wherein at least one color toner image is electrophotog. formed on the transfer layer and then transferred together with said transfer layer to a sheet material to prepare the color proof, wherein said photoconductive layer comprises a copolymer and/or a crosslinked polymer particle which contain units having F atom(s) and/or Si atom(s) at least in the region near the surface facing said transfer layer and the surface of said photoconductive layer which contacts with the transfer layer has tack strength of ≤150 g ⋅ force, which is measured by Pressure Sensitive Tape and Sheet Test of JIS Z0237-1980.

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L31 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN

TI Spongian pentacyclic diterpenes. Stereoselective synthesis of (-)-dendrillol-1

AN 1992:651580 CAPLUS

DN 117:251580

OREF 117:43571a,43574a

TI Spongian pentacyclic diterpenes. Stereoselective synthesis of (-)-dendrillol-1

AU Abad, Antonio; Arno, Manuel; Cunat, Ana C.; Marin, M. Luisa; Zaragoza, Ramon J.

CS Dep. Quim. Org., Univ. Valencia, Burjasot, 46100, Spain

SO Journal of Organic Chemistry (1992), 57(25), 6861-9 CODEN: JOCEAH; ISSN: 0022-3263

DT Journal

LA English

OS CASREACT 117:251580

GΙ

AB A formal total synthesis of the spongian diterpene (-)-dendrillol 1 (I), via a concise approach that can be used for the synthesis of other

pentacyclic spongian diterpenes, is based on the intramol. acetalization of an acid-dialdehyde II, which is prepared from (+)-podocarp-8(14)-en-13-one III via a sequence of transformations involving (a) introduction of a latent dialdehyde unit on III by photochem. reaction with acetylene, (b) reductive carboxylation at C-13 of photoadduct IV to obtain acid V, and (c) elaboration of the dialdehyde moiety at C-8 and C-14 of V by ozonolysis. Several procedures that have been examined for the reductive carboxylation at C-13 of IV are described. A simple three-step procedure to effect the conversion of a podocarp-8-en-13-one system into a C-17-functionalized beyerane compound is also reported.

OSC.G 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)

L31 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2010 ACS on STN

TI First synthetic approach to spongian pentacyclic diterpenoids. Enantioselective synthesis of dendrillol 1

AN 1992:83952 CAPLUS

DN 116:83952

OREF 116:14311a,14314a

TI First synthetic approach to spongian pentacyclic diterpenoids. Enantioselective synthesis of dendrillol 1

AU Abad, Antonio; Arno, Manuel; Marin, M. Luisa; Zaragoza, Ramon J.

CS Fac. Quim., Univ. Valencia, Burjassot, E-46100, Spain

SO Synlett (1991), (11), 789-91 CODEN: SYNLES; ISSN: 0936-5214

DT Journal

LA English

OS CASREACT 116:83952

GΙ

4

AB The enantioselective synthesis of the spongian diterpene dendrillol 1 (3), from chiral (+)-podocarp-8(14)-en-13-one (5) of known absolute configuration, is described. Key intermediate in this synthesis is the acid-dialdehyde 4

(8,14-diformylpodocarpane-13-carboxylic acid), which was prepared from 5 by a reaction sequence involving photo-addition of acetylene, nucleophilic carboxylation, reductive dehydroxylation, and ozonolysis. DSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

=> logoff hold COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 134.57 757.06 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -14.45-16.15

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 07:40:03 ON 14 MAY 2010

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LOGINID:SSSPTA1623PAZ

#### PASSWORD:

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FOLL ESTIMATED COST	134.37	737.06
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	ENTRY -14.45	SESSION -16.15
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	ENTRY	SESSION
FULL ESTIMATED COST	135.07	757.56
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	ENTRY -14.45	SESSION -16.15
CII DODDOINDEN LINIOE	14.40	10.10

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STRUCTURE FILE UPDATES: 12 MAY 2010 HIGHEST RN 1222633-86-4 DICTIONARY FILE UPDATES: 12 MAY 2010 HIGHEST RN 1222633-86-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 8, 2010.

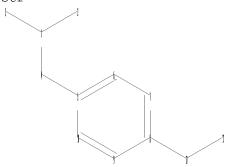
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files\10594430\10594430 dendron unit.str

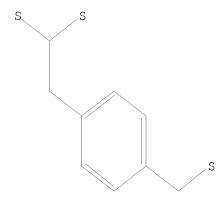


chain nodes : 1 2 3 4 11 12 ring nodes : 5 6 7 8 9 10 chain bonds : 1-3 1-2 1-4 4-5 8-11 11 - 12ring bonds : 5-6 5-10 6-7 7-8 8-9 9 - 10exact/norm bonds : 1-3 1-2 11-12 exact bonds : 1-4 4-5 8-11 normalized bonds : 5-6 5-10 6-7 7-8 8-9 9-10

Match level:
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:CLASS

L32 STRUCTURE UPLOADED

=> d 132 L32 HAS NO ANSWERS L32 STR



Structure attributes must be viewed using STN Express query preparation.

=> search 132 sdss sam
COMBINATION OF STRUCTURE AND TEXT TERMS NOT VALID
The query entered contains both search terms created by
structure-building or screen commands and text search terms. L#s
created via the STRUCTURE or SCREEN commands must be searched in the
structures files separately from text terms or profiles. The L#
answer sets from structure searches can be used in crossover searches
and can be combined with text terms.

=> search 132 sss sam
SAMPLE SEARCH INITIATED 08:27:35 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 13 TO ITERATE

100.0% PROCESSED 13 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 44 TO 476

PROJECTED ANSWERS: 0 TO 0

L33 0 SEA SSS SAM L32

=> search 132 sss full

FULL SEARCH INITIATED 08:27:47 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 234 TO ITERATE

100.0% PROCESSED 234 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

L34 0 SEA SSS FUL L32

=> d cost COST IN U.S. DOLLARS

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
CONNECT CHARGES	2.52	38.25
NETWORK CHARGES	0.42	6.30
SEARCH CHARGES	191.05	791.92
DISPLAY CHARGES	0.00	115.08
FULL ESTIMATED COST	193.99	951.55

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL ENTRY SESSION 0.00 -16.15

CA SUBSCRIBER PRICE

IN FILE 'REGISTRY' AT 08:30:17 ON 14 MAY 2010

=>

Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files\ $10594430\10594430$  2nd dendron unit.str

chain nodes :
1 2 9 10 11
ring nodes :
3 4 5 6 7 8
chain bonds :
1-2 2-3 2-11 6-9 9-10
ring bonds :
3-4 3-8 4-5 5-6 6-7 7-8
exact/norm bonds :
1-2 2-11 9-10

1-2 2-11 9-1 exact bonds: 2-3 6-9

normalized bonds :

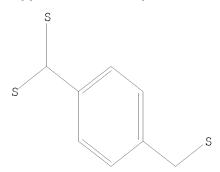
3-4 3-8 4-5 5-6 6-7 7-8

Match level :

1:CLASS 2:CLASS 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:CLASS 10:CLASS 11:CLASS

# L35 STRUCTURE UPLOADED

=> d 135 L35 HAS NO ANSWERS L35 STR



Structure attributes must be viewed using STN Express query preparation.

=> search 135 sss sam

SAMPLE SEARCH INITIATED 08:30:46 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 44 TO ITERATE

100.0% PROCESSED 44 ITERATIONS 6 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*
PROJECTED ITERATIONS: 483 TO 1277
PROJECTED ANSWERS: 6 TO 266

L36 6 SEA SSS SAM L35

=> d scan

L36 6 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN Benzene, 1-[bis(ethylsulfonyl)methyl]-4-[1,1-bis(ethylsulfonyl)-3-

phenylpropyl]-

MF C24 H34 O8 S4

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):6

L36 6 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN Benzene, 1,4-bis[bis[(phenylmethyl)thio]methyl]-

MF C36 H34 S4

L36 6 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

MF C24 H34 O8 S8

CI COM

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L36 6 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Benzofuran, 4,7-bis[bis(phenylthio)methyl]-MF C34 H26 O S4

L36 6 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN
IN Benzenemethanethiol, 4-[bis[[4-[bis[(4-bromophenyl)thio]methyl]phenyl]methyl]thio]methyl]MF C48 H38 Br4 S7

PAGE 1-B

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L36 6 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN 1,4-Benzenedicarbodithioic acid

MF C8 H6 S4

CI COM

ALL ANSWERS HAVE BEEN SCANNED

=> search 135 sss full FULL SEARCH INITIATED 08:31:23 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 838 TO ITERATE

100.0% PROCESSED 838 ITERATIONS 54 ANSWERS SEARCH TIME: 00.00.01

L37 54 SEA SSS FUL L35

=> d scan

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN Pyridine, 2-[[[4-[bis[(4-bromophenyl)thio]methyl]phenyl]methyl]thio]-5nitro-

MF C25 H18 Br2 N2 O2 S3

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

- L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN
- IN Acetic acid, 2,2',2'',2'''-[1,4 phenylenebis[methylidynebis(thio)]]tetrakis-, tetrakis(2-mercaptoethyl)
   ester, polymer with 1,3,5-tri-2-propenyl-1,3,5-triazine-2,4,6(1H,3H,5H) trione (9CI)
- MF (C24 H34 O8 S8 . C12 H15 N3 O3)x
- CI PMS

CM 1

CM 2

$$H_2C = CH - CH_2$$
 $CH_2 - CH = CH_2$ 
 $H_2C = CH - CH_2$ 

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN 1,4-Benzenedicarbodithioic acid, compd. with piperidine (1:2), polymer with 1,1'-(1,4-phenylene)bis[2-bromoethanone] (9CI)

MF (C10 H8 Br2 O2 . C8 H6 S4 . 2 C5 H11 N)x

CI PMS

\*\*RELATED POLYMERS AVAILABLE WITH POLYLINK\*\*

CM 1

CM 2

CM 3

CM 4

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN 1,4-Benzenedicarbodithioic acid, compd. with piperidine (1:2)

MF C8 H6 S4 . 2 C5 H11 N

CI COM

CM 1

CM 2

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN
IN Benzene, 1,4-bis[bis(ethylthio)[4-(phenylmethyl)phenyl]methyl]MF C42 H46 S4

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Benzene, 1,4-bis[bis(propylthio)methyl]-MF C20 H34 S4

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

MF C24 H34 O8 S8

CI COM

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN 1,4-Benzenedicarbodithioic acid, compd. with piperidine (1:2), polymer with 1,1'-(1,3-phenylene)bis[2-bromoethanone] (9CI)

MF (C10 H8 Br2 O2 . C8 H6 S4 . 2 C5 H11 N)x

CI PMS

\*\*RELATED POLYMERS AVAILABLE WITH POLYLINK\*\*

CM 1

CM 2

CM 3

CM 4

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Benzene, 1,4-bis[bis(ethylthio)methyl]-MF C16 H26 S4

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN Methanethiol, [1,2-ethanediylidenetetrakis(thio)]tetrakis-, polymer with 3,3',3'',3'''-[1,4-phenylenebis[methylidynebis(thio)]]tetrakis[thietane] and sulfur (9CI)

MF (C20 H26 S8 . C6 H14 S8 . S) $\times$ 

CI PMS

CM 1

CM 2

CM 3

S

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Benzene, 1,4-bis[bis(ethylsulfonyl)methyl]-, ion(2-) MF C16 H24 O8 S4 CI COM

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):file caplus 'FILE CAPLUS' IS NOT VALID HERE

To display more answers, enter the number of answers you would like to see. To end the display, enter "NONE", "N", "0", or "END". HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 387.49 1145.05

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL
ENTRY SESSION

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FILE COVERS 1907 - 14 May 2010 VOL 152 ISS 21 FILE LAST UPDATED: 13 May 2010 (20100513/ED) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2010 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2010

CAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2010.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> 137 L38 39 L37

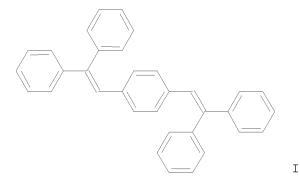
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(FILE 'HOME' ENTERED AT 05:47:13 ON 14 MAY 2010)

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L1 STRUCTURE UPLOADED
L2 0 SEARCH L1 SSS SAM
L3 0 SEARCH L1 SSS FULL
L4 STRUCTURE UPLOADED
L5 0 SEARCH L4 SSS SAM
L6 1 SEARCH L4 SSS FULL

FILE 'CAPLUS' ENTERED AT 06:01:57 ON 14 MAY 2010 L7 1 L6 618641 THIO? 1.8 17009 DENDRIMER L9 L10 1032164 DENDRON OR STAR? OR DENDR? L11 1032164 L9 OR L10 L12 22888 L8 AND L11 L13 2032 THIOACETAL L14 71 L12 AND L13 L15 27 L13(L)L11

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FILE 'REGISTRY' ENTERED AT 06:13:23 ON 14 MAY 2010
L16
                STRUCTURE UPLOADED
L17
             50 SEARCH L16 SSS SAM
L18
          45845 SEARCH L16 SSS FULL
                SAVE TEMP L18 THIOCORE/A
     FILE 'CAPLUS' ENTERED AT 06:16:17 ON 14 MAY 2010
         23329 L18
L19
L20
          1109 L11 AND L19
L21
            171 L11 (L) L19
L22
          66784 ACETAL
L23
           1758 L11(L)L22
      1761105 PHOTO?
L24
             71 L23 AND L24
L25
L26
        256509 DENDR? OR STAR
L27
             6 L25 AND L26
L28
             71 L26(L) L19
L29
        134617 PHOTO
L30
      1761105 PHOTO?
L31
             8 L28 AND L30
     FILE 'REGISTRY' ENTERED AT 08:26:50 ON 14 MAY 2010
L32
               STRUCTURE UPLOADED
L33
              0 SEARCH L32 SSS SAM
L34
              0 SEARCH L32 SSS FULL
L35
                STRUCTURE UPLOADED
L36
              6 SEARCH L35 SSS SAM
             54 SEARCH L35 SSS FULL
L37
     FILE 'CAPLUS' ENTERED AT 08:33:09 ON 14 MAY 2010
L38
             39 L37
=> 124 and 138
L39
            1 L24 AND L38
=> d 139 ti fbib abs
L39 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2010 ACS on STN
     Preparation of multicarbene complexes and their application to synthesis
     of polycyclic aromatic hydrocarbons
ΑN
     2004:778325 CAPLUS
DN
     143:26306
TΙ
     Preparation of multicarbene complexes and their application to synthesis
     of polycyclic aromatic hydrocarbons
ΑU
     Xu, Song
     Department of Applied Chemistry, Tokyo University of Agriculture and
CS
     Technology, Japan
     Nippon Kessho Seicho Gakkaishi (2004), 31(3), 184
SO
     CODEN: NKSGDK; ISSN: 0385-6275
PΒ
     Nippon Kessho Seicho Gakkai
DT
     Journal
LA
     English
     CASREACT 143:26306
OS
GΙ
```



AB Multicarbenes, derived from multi-thioacetals and a titanocene, underwent condensation with benzophenones or 9-fluorenone to produce conjugated polycyclic aromatic hydrocarbons, e.g., I. The polycyclic aromatic hydrocarbons

were obtained in good yields.

=> file req COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 5.10 1150.15 DISCOUNT AMOUNTS (FOR OUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -0.85-17.00

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STRUCTURE FILE UPDATES: 12 MAY 2010 HIGHEST RN 1222633-86-4 DICTIONARY FILE UPDATES: 12 MAY 2010 HIGHEST RN 1222633-86-4

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TSCA INFORMATION NOW CURRENT THROUGH January 8, 2010.

Please note that search-term pricing does apply when conducting  ${\tt SmartSELECT}$  searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

E2	1	PYRIDINE, 2-(((4-(BIS(((4-(BIS(((4-BROMOPHENYL)THIO)METHYL)PH
	_	ENYL) METHYL) THIO) METHYL) PHENYL) METHYL) THIO) -5-NITRO-/CN
E3	1>	PYRIDINE, 2-(((4-(BIS((4-BROMOPHENYL)THIO)METHYL)PHENYL)METH
		YL)THIO)-5-NITRO-/CN
E4	1	PYRIDINE, 2-(((4-(CHLOROMETHYL)PHENYL)METHYL)THIO)-/CN
E5	1	PYRIDINE, 2-(((4-(CYCLOPROPYLMETHYL))-5-(1-METHYL-2-PIPERIDIN
		YL)-4H-1,2,4-TRIAZOL-3-YL)THIO)METHYL)-/CN
E6	1	PYRIDINE, 2-(((4-(CYCLOPROPYLMETHYL)-5-(2-METHOXYPHENYL)-4H-
		1,2,4-TRIAZOL-3-YL)THIO)METHYL)-/CN
E7	1	PYRIDINE, 2-(((4-(CYCLOPROPYLMETHYL))-5-(2-THIENYL))-4H-1,2,4-
		TRIAZOL-3-YL)THIO)METHYL)-/CN
E8	1	PYRIDINE, 2-(((4-(DIFLUOROMETHOXY)-3-METHOXYPHENYL)METHYL)TH
		IO)-5-(1-PYRROLIDINYLSULFONYL)-/CN
E9	1	PYRIDINE, 2-(((4-(METHYLTHIO)PHENYL)METHYL)THIO)-5-(1-PIPERI
		DINYLSULFONYL)-/CN
E10	1	PYRIDINE, 2-(((4-(METHYLTHIO)PHENYL)METHYL)THIO)-5-(1-PYRROL
		IDINYLSULFONYL)-/CN
E11	1	PYRIDINE, 2-(((4-(PHENYLMETHOXY)PHENYL)METHYL)THIO)-/CN
E12	1	PYRIDINE, 2-(((4-(PHENYLMETHOXY)PHENYL)METHYL)THIO)-, HYDROC
		HLORIDE/CN
=> e3		
L40	1 "PY	RIDINE, 2-(((4-(BIS((4-BROMOPHENYL)THIO)METHYL)PHENYL)METHYL)
		O)-5-NITRO-"/CN

=> file caplus		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	8.93	1159.08
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FILE LAST UPDATED: 13 May 2010 (20100513/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2010

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2010

CAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2010.

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http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> 140

1 L40 L41

=> d 141 ti fbib abs

- L41 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2010 ACS on STN
- Dendrons and dendrimers having thioacetal linkages and method of producing the same
- AN 2005:1075768 CAPLUS
- DN 143:367755
- TI Dendrons and dendrimers having thioacetal linkages and method of producing the same
- IN Nakamura, Koki
- PA Fuji Photo Film Co., Ltd., Japan
- PCT Int. Appl., 45 pp. SO

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1 PATENT NO.					KIND DATE			APPLICATION NO.						DATE				
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ΡI	WO	2005092847 W: AE. AG. AL.				A1		2005		WO 2005-JP6545 BA, BB, BG, BR, BW,					20050328			
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										JP 2004-96080						A 2	20040 20040 20050	329
										WO 2005-JP6545					1	W 2	20050	328
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											JP 2004-96073					A 2	20040	329
										JP 2004-96080						A 2	20040	329
												005-			1		20050	
	US	2008	0262	238		A1		2008	1023			006-					20060	
											JP 2	004-	9540	8		A 2	20040	329

JP 2004-96073 A 20040329 JP 2004-96080 A 20040329 WO 2005-JP6545 W 20050328

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS MARPAT 143:367755

AB Dendrons and dendrimers, useful in nanotechnol., electronics, and drug-delivery systems, are manufactured having thioacetal linkages formed by reaction of carbonyl compds. with thiols. Higher yields were obtained in the formation of the thioacetal linkages by using ether, ester, amide, sulfoxide, alc., nitrile, and sulfone as solvents. Thus, reaction of 4-hydroxythiophenol (I) with 2-chloropyridine, reaction of the resulting 2-(4-hydroxyphenylthio)pyridine with 2-bromomethyl-1,3-dioxolane, reaction of the resulting 2-[4-[(1,3-dioxolan-2-yl)methoxy]phenylthio]pyridine with I, reaction of the resulting 2-[4-[2,2-bis(4hydroxyphenylthio)methoxy]phenylthio]pyridine with 4-[4-(6-bromohexyloxy)phenyl]benzonitrile, reaction of the resulting 2-[[4-[2,2-bis[[4-[6-[4-(4cyanophenyl)phenoxy]hexyloxy]phenyl]thio]ethoxy]phenyl]thio]pyridine with MeI, reaction of the resulting pyridinium salt with hydrazine hydrate, and reaction of the resulting benzenethiol with tetrakis(3-formylphenoxymethyl)methane core.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file rea COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 4.10 1163.18 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -0.85-17.85

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STRUCTURE FILE UPDATES: 12 MAY 2010 HIGHEST RN 1222633-86-4 DICTIONARY FILE UPDATES: 12 MAY 2010 HIGHEST RN 1222633-86-4

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http://www.cas.org/support/stngen/stndoc/properties.html

=> d scan 137

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

Br HS-CH<sub>2</sub> Br S-CH-S-CH<sub>2</sub> S-CH-S-CH<sub>2</sub>

PAGE 1-B

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):20

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Naphthalene, 1,4-bis[bis(ethylthio)methyl]-MF C20 H28 S4

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

MF (C24 H34 O8 S8 . C12 H15 N3 O3)x

CI PMS

CM 1

CM 2

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Benzene, 1,4-bis[bis[(1,1-dimethylethyl)thio]methyl]-MF C24 H42 S4

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN
IN Potassium, [p-phenylenebis[bis(ethylsulfonyl)methylene]]di- (7CI)
MF C16 H24 O8 S4 . 2 K

●2 K+

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Benzene, 1,4-bis[bis(phenylthio)methyl]-MF C32 H26 S4

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN 1,4-Benzenedicarbodithioic acid

MF C8 H6 S4

CI COM

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN
IN Thietane, 3,3',3'',3'''-[1,4-phenylenebis[methylidynebis(thio)]]tetrakis-,
homopolymer (9CI)

MF (C20 H26 S8)x CI PMS

CM 1

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN
IN Benzenemethanethiol, 4-[bis[(4-bromophenyl)thio]methyl]MF C20 H16 Br2 S3

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Benzofuran, 4,7-bis[bis(ethylthio)methyl]-MF C18 H26 O S4

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN 9,10-Anthracenedicarbodithioic acid, compd. with piperidine (1:2) (9CI) MF C16 H10 S4 . 2 C5 H11 N

CM 1

CM 2

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN 1,4-Benzenedicarbodithioic acid, potassium salt (1:2) MF C8 H6 S4 . 2 K

●2 K

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN
IN Benzene, 1,4-bis[bis(ethylsulfonyl)methyl]-, compd. with acetonitrile (1:1)
MF C16 H26 O8 S4 . C2 H3 N

CM 1

CM 2

 $_{\mathrm{H3C-C}}$ 

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Benzene, 1,4-bis[bis(ethylthio)methyl]-MF C16 H26 S4

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Ethanol, 2,2'-[1,4-phenylenebis[[[(4-nitrophenyl)sulfonyl]methylene]thio]]bis-(9CI) MF C24 H24 N2 O10 S4

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN 2,1,3-Benzoxadiazol-4-amine, N-[[4-[bis[[[4-[bis[[[4-[bis[(4-bis[methyl]thio]methyl]thio]methyl]thio]methyl]thio]methyl]phenyl]methyl]-N-ethyl-7-nitro-

MF C112 H88 Br8 N4 O3 S14

PAGE 1-A

PAGE 1-B

Br S 
$$CH_2$$
  $CH_2$   $CH$ 

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Benzene, 1,4-bis[bis(propylthio)methyl]-MF C20 H34 S4

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, L37 54 ANSWERS IN

1,4-phenylenebis[methylidynebis(thio-2,1-ethanediyl)] ester (9CI)

C84 H122 O12 S4 MF

PAGE 1-A

PAGE 1-B

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN 10,14-Dioxa-4,6-dithiapentadecanoic acid,
5-[4-[bis[(2-carboxyethyl)thio]methyl]phenyl]-13-methyl-9-oxo-,
1-(3-methoxybutyl) ester

MF C30 H46 O10 S4

PAGE 1-B

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN 1,4-Benzenedicarbodithioic acid, compd. with piperidine (1:2), polymer with 1,1'-(1,4-phenylene)bis[2-bromoethanone] (9CI)

(C10 H8 Br2 O2 . C8 H6 S4 . 2 C5 H11 N)x

CI PMS

MF

\*\*RELATED POLYMERS AVAILABLE WITH POLYLINK\*\*

CM 1

$$\begin{array}{c|c} & \circ \\ & \parallel \\ \mathsf{C-CH}_2\mathsf{Br} \\ \\ \mathsf{BrCH}_2-\mathsf{C} \\ & \parallel \\ \mathsf{O} \end{array}$$

CM 2

CM 3

CM 4

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Benzene, 1,4-bis[bromobis(ethylsulfonyl)methyl]-MF C16 H24 Br2 O8 S4

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):20

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Benzene, 1,2,4,5-tetrakis[bis(phenylthio)methyl]-MF C58 H46 S8

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN Acetic acid, thio-, S,S,S-triester with

10-(mercaptomethyl)-2,3,6,7-tetramethoxy-9-anthracenemethanedithiol (8CI)

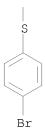
MF C26 H28 O7 S3

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN Pyridine, 2-[[[4-[bis[[[4-[bis[[[4-[bis[(4-bromophenyl)thio]methyl]phenyl]methyl]thio]methyl]phenyl]methyl]thio]methyl]thio]-5-nitro-

MF C109 H84 Br8 N2 O2 S15

PAGE 2-A



L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Naphthalene, 1,4-bis[bis(phenylthio)methyl]-MF C36 H28 S4

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

MF (C24 H34 O8 S8 . C10 H8 N2 O2 . C3 H8 S3)x

CI PMS

$$2 \left[ D1-CH_2-NCO \right]$$

CM 3

$$$\rm SH$$$
  $|$\rm HS-CH_2-CH-CH_2-SH$$ 

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN 1,4-Naphthalenedicarbodithioic acid

MF C12 H8 S4

CI COM

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN
IN 1,4-Benzenedicarbodithioic acid, compd. with piperidine (1:2), polymer with 1,1'-(oxydi-4,1-phenylene)bis[2-bromoethanone] (9CI)

MF (C16 H12 Br2 O3 . C8 H6 S4 . 2 C5 H11 N)x CI PMS

\*\*RELATED POLYMERS AVAILABLE WITH POLYLINK\*\*

CM 1

CM 2

CM 3

CM 4

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Benzene, 1,4-bis[bis[(4-methylphenyl)thio]methyl]-MF C36 H34 S4

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

MF C50 H84 N2 O8 S4

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN
- IN Methanethiol, [1,2-ethanediylidenetetrakis(thio)]tetrakis-, polymer with 3,3',3'',3'''-[1,4-phenylenebis[methylidynebis(thio)]]tetrakis[thietane] and sulfur (9CI)
- MF (C20 H26 S8 . C6 H14 S8 . S)x
- CI PMS

CM 3

S

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN Pyridine, 2-[[[4-[bis[[[4-[bis[(4bromophenyl)thio]methyl]phenyl]methyl]thio]methyl]phenyl]methyl]thio]-5nitro-

MF C53 H40 Br4 N2 O2 S7

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Benzofuran, 4,7-bis[bis(phenylthio)methyl]-MF C34 H26 O S4

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN Acetic acid, 2,2',2'',2'''-[1,4phenylenebis[methylidynebis(thio)]]tetrakis-, tetrakis(2-mercaptoethyl)
ester (9CI)

MF C24 H34 O8 S8
CI COM

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Benzene, 1,4-bis[bis[(phenylmethyl)thio]methyl]-MF C36 H34 S4

$$\begin{array}{c} \text{S-CH}_2\text{-Ph} \\ \mid \\ \text{CH-S-CH}_2\text{-Ph} \\ \\ \text{Ph-CH}_2\text{-S-CH} \\ \mid \\ \text{Ph-CH}_2\text{-S} \end{array}$$

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Benzene, 1,4-bis[bis(ethylsulfonyl)iodomethyl]-MF C16 H24 I2 O8 S4

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN 1,4-Benzenedicarbodithioic acid, compd. with piperidine (1:2)

MF C8 H6 S4 . 2 C5 H11 N

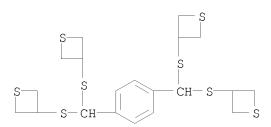
CI COM

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN
IN Benzene, 1,4-bis[(ethylthio)[(2,3,4-trichlorophenyl)sulfonyl]methyl]MF C24 H20 C16 O4 S4

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN
IN Thietane, 3,3',3'',3'''-[1,4-phenylenebis[methylidynebis(thio)]]tetrakis(9CI)
MF C20 H26 S8
CI COM



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Pyridine, 2-[[[4-[bis[(4-bromophenyl)thio]methyl]phenyl]methyl]thio]-5-

L37

54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN Acetic acid, 2,2',2'',2'''-[1,4- ΙN phenylenebis[methylidynebis(thio)]]tetrakis-, tetrakis(2-mercaptoethyl) ester, polymer with bis(isocyanatomethyl)benzene and 1,2-propanedithiol (9CI)

MF(C24 H34 O8 S8 . C10 H8 N2 O2 . C3 H8 S2)x

CI PMS

> CM 1

$$2 \left[ D1-CH_2-NCO \right]$$

$$^{\rm SH}_{\rm H_3C-CH-CH_2-SH}$$

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):20

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN 9,10-Anthracenedicarbodithioic acid

MF C16 H10 S4

CI COM

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN 1,4-Benzenedicarbodithioic acid, potassium salt, hydrate (1:2:2)

MF C8 H6 S4 . 2 H2 O . 2 K

●2 K

●2 H2O

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Benzene, 1,4-bis[bis(ethylsulfonyl)methyl]-

MF C16 H26 O8 S4

CI COM

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN 1,4-Benzenedicarbodithioic acid, compd. with piperidine (1:1) (9CI) MF C8 H6 S4 . C5 H11 N

CM 1

REGISTRY COPYRIGHT 2010 ACS on STN L37 54 ANSWERS

Acetic acid, 2,2'-[1,4-phenylenebis[methylidynebis(thio)]]tetrakis- (9CI) ΙN

C16 H18 O8 S4 MF

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

REGISTRY COPYRIGHT 2010 ACS on STN L37 54 ANSWERS

Benzenemethanethiol, 4-[bis[[[4-[bis[[[4-[bis[(4-ΙN bromophenyl)thio]methyl]phenyl]methyl]thio]methyl]phenyl]methyl]thio]methy 1]-

C104 H82 Br8 S15 MF

PAGE 1-A

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN Benzene, 1,4-bis[bis(ethylsulfonyl)methyl]-, ion(2-)

MF C16 H24 O8 S4

CI COM

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN Acetic acid, 2,2',2'',2'''-[1,4phenylenebis[methylidynebis(thio)]]tetrakis-, tetrakis(2-mercaptoethyl)
ester, polymer with bis(isocyanatomethyl)benzene (9CI)

MF (C24 H34 O8 S8 . C10 H8 N2 O2) $\times$ 

CI PMS

CM 1

CM 2

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN 1,4-Naphthalenedicarbodithioic acid, compd. with piperidine (1:2) (9CI) MF C12 H8 S4 . 2 C5 H11 N

CM 2

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN 1,4-Benzenedicarbodithioic acid, compd. with piperidine (1:2), polymer with 1,1'-(1,3-phenylene)bis[2-bromoethanone] (9CI)

MF (C10 H8 Br2 O2 . C8 H6 S4 . 2 C5 H11 N)x

CI PMS

\*\*RELATED POLYMERS AVAILABLE WITH POLYLINK\*\*

CM 1

CM 2

CM 3



L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN Benzene, 1-[bis(ethylsulfonyl)methyl]-4-[1,1-bis(ethylsulfonyl)-3phenylpropyl]-

MF C24 H34 O8 S4

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN IN Benzene, 1,2,4,5-tetrakis[bis(ethylthio)methyl]-MF C26 H46 S8

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L37 54 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN Benzene, 1,4-bis[bis(ethylthio)[4-(phenylmethyl)phenyl]methyl]-

MF C42 H46 S4

# ALL ANSWERS HAVE BEEN SCANNED

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0 LOIGOFF

43 HOLD

L42 0 LOIGOFF HOLD

(LOIGOFF(W)HOLD)

=> logoff hold

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